

# EAST Search History

Ref #	Hits	Search Query	Dbs	Default Operator	Plurals	Time Stamp
S1	704	451/56.cds.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 10:37
S2	478	451/60.cds.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 10:37
S3	254722	polish\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 10:38
S4	2208	451/41.cds. and polish\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 10:38
S5	480	451/56.cds. and polish\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 10:38
S6	380	451/60.cds. and polish\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 10:39
S7	419839	pad	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 10:39
S8	46	"3-hydroxy-4-pyrones"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 13:04
S9	955901	("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane borohydrides (dialkylamine adj acid) hydroxyamine (hypophosphorous adj acid) trihydroxybenzene (solvated adj electrons) (sulfurous adj acid)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 13:15

# EAST Search History

S10	955901	("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane borohydrides or (dialkylamine adj boranes) or formaldehyde (formic adj acid) or hydrogen or hydroquinones or hydroxyamine or (hypophosphorous adj acid) or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid) ("428" or "156" or "51").cls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 13:17
S11	303143		US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 13:18
S12	43264	((("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane borohydrides (dialkylamine adj boranes) formaldehyde (formic adj acid) hydrogen hydroquinones hydroxyamine (hypophosphorous adj acid) trihydroxybenzene (solvated adj electrons) (sulfurous adj acid) ) and ("428" or "156" or "51").cls.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 13:18
S13	0	"451.cls"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 13:18
S14	64433	"451".cls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 13:18
S15	1097	((("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane borohydrides (dialkylamine adj boranes) formaldehyde (formic adj acid) hydrogen hydroquinones hydroxyamine (hypophosphorous adj acid) trihydroxybenzene (solvated adj electrons) (sulfurous adj acid) ) and "451".cls. reducing agent	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 13:19
S16	2868440		US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 13:23

# EAST Search History

S17	834	((("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane borohydrides (dialkylamine adj boranes) formaldehyde (formic adj acid) hydrogen hydroquinones hydroxylamine (hypophosphorous adj acid) trihydroxybenzene (solvated adj electrons) (sulfurous adj acid) ) and "451".das.) and (reducing agent)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 13:23
S18	1562	(451/41.cds. and polish\$3) and pad	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 13:34
S19	396	(451/56.cds. and polish\$3) and pad	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 13:31
S20	263	(451/60.cds. and polish\$3) and pad	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 13:31
S21	337	((("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane borohydrides (dialkylamine adj boranes) formaldehyde (formic adj acid) hydrogen hydroquinones hydroxylamine (hypophosphorous adj acid) trihydroxybenzene (solvated adj electrons) (sulfurous adj acid) ) and (((451/41.cds. and polish\$3) and pad) or ((451/56.cds. and polish\$3) and pad) or ((451/60.cds. and polish\$3) and pad)))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 13:42

# EAST Search History

S22	49	((("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane borohydrides (dialkylamine adj boranes) formaldehyde (formic adj acid) hydrogen hydroquinones hydroxylamine (hypophosphorous adj acid) trihydroxybenzene (solvated adj electrons) (sulfurous adj acid) ) and (((451/41.cds. and polish\$3) and pad) or ((451/56.cds. and polish\$3) and pad))) not ((451/41.cds. and polish\$3) and pad) and (((("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane borohydrides (dialkylamine adj boranes) formaldehyde (formic adj acid) hydrogen hydroquinones hydroxylamine (hypophosphorous adj acid) trihydroxybenzene (solvated adj electrons) (sulfurous adj acid) ) and (((451/41.cds. and polish\$3) and pad) or ((451/56.cds. and polish\$3) and pad)))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 13:35
S23	288	((451/41.cds. and polish\$3) and pad) and (((("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane borohydrides (dialkylamine adj boranes) formaldehyde (formic adj acid) hydrogen hydroquinones hydroxylamine (hypophosphorous adj acid) trihydroxybenzene (solvated adj electrons) (sulfurous adj acid) ) and (((451/41.cds. and polish\$3) and pad) or ((451/56.cds. and polish\$3) and pad) or ((451/60.cds. and polish\$3) and pad)))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/01/24 13:20
S24	93	((("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane borohydrides (dialkylamine adj boranes) formaldehyde (formic adj acid) hydrogen hydroquinones hydroxylamine (hypophosphorous adj acid) trihydroxybenzene (solvated adj electrons) (sulfurous adj acid) ) and (((451/41.cds. and polish\$3) and pad) or ((451/56.cds. and polish\$3) and pad)))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 13:38

# EAST Search History

S25	288	(("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane borohydrides (dialkylamine adj boranes) formaldehyde (formic acid) hydrogen hydroquinones hydroxylamine (hypophosphorous adj acid) trihydroxybenzene (solvated adj electrons) (sulfurous adj acid) ) and ((451/41.cds. and polish\$3) and pad)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 15:39
S26	3038	oxidize\$4 and abrasive and polish\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 14:22
S27	1	oxidize\$2 and abrasive and polish\$4 and (reducing adj agent) and ((liquid or aqueous) adj carrier)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 14:18
S28	12	("4769046"   "5489233"   "5527423"   "5958794"   "6001269"   "6015506"   "6062968"   "6117000"   "6117783"   "6126532"   "6290736"   "6299795"   "2002/0004360"   "2002/0010232"   "2002/0017630").PN.	USPAT	OR	OFF	2004/09/22 14:19
S29	77604	tantalum	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 14:22
S30	2905	451/41.cds.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 14:23
S31	190	tantalum and 451/41.cds.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/22 14:23
S32	895	(\$1-alumina or alpha-alumina or (alpha near alumina)) with abrasive	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/21 15:29
S33	0	"451".das	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/01/21 15:11
S34	64929	"451".das.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/01/21 15:12

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S35	66	S32 and S34	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/01/21 16:01
S36	6947	(silica or (turned adj alumina)) with abrasive	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/21 15:30
S37	1138	(S32 or S36) and S34	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/21 15:30
S38	11	S35 and (reducing adj agent)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/01/21 15:31
S39	27	S37 and (reducing adj agent)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/01/21 16:01
S40	1109	S36 and S34	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/01/21 16:01
S41	24	S40 and (reducing adj agent)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/01/21 16:01
S42	2	"6454822".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/24 09:38
S43	64929	"451".clas.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/01/24 10:45
S44	195	S43 and ((iridium adj oxide) or (tantalum same (oxidized, oxide, oxidizer))) and ((polishing adj pad or abrasive))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/24 10:48
S45	195	S43 and ((iridium adj oxide) or (tantalum same (oxidized, oxide, oxidizer))) and ((polishing adj pad or abrasive))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/24 09:58

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S46	6	(US-20020182982-\$ or US-20030013387-\$ or US-20040029495-\$ or US-20040132385-\$) did. or (US-6454822-\$ or US-6709316-\$) did.	US-PGRUB; USPAT	OR	OFF	2005/01/24 09:59
S47	2	S45 and S46	US-PGRUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/24 10:08
S48	37	(silicone adj oxide) with "Si"	US-PGRUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/24 11:17
S49	6851	silicone near4 metal	US-PGRUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/24 10:15
S50	2852	silicone near2 metal	US-PGRUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/24 10:15
S51	740	silicone near1 metal	US-PGRUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/24 10:15
S52	1	S43 and S51	US-PGRUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/24 10:15
S53	5	S43 and S50	US-PGRUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/24 10:16
S54	11	S43 and S49	US-PGRUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/24 10:16

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S55	10	S54 not S51	US-PGRUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/24 10:17
S56	6	S54 not S53	US-PGRUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/24 10:23
S57	0	S47 and (iridium adj oxide)	US-PGRUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/24 10:24
S58	2	S43 and (iridium adj oxide)	US-PGRUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/24 10:47
S59	212721	"428".das.	US-PGRUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/01/24 10:46
S60	609	(substrate or wafer or semiconductor or semi-conductor) with (iridium adj oxide)	US-PGRUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/24 10:49
S61	2	S43 and (iridium adj oxide)	US-PGRUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/24 10:49
S62	15	((substrate or wafer or semiconductor or semi-conductor) with (iridium adj oxide)) and ((polishing adj pad) or abrasive)	US-PGRUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/24 10:50
S63	1388	(copper adj oxide) with "Cu"	US-PGRUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/24 11:17
S64	8	S63 and S43	US-PGRUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/01/24 11:17

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S65	665	(iridium adj oxide) and (polish polishing CMP ("chemical mechanical polishing"))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/01/24 13:23
S66	44	S65 and (reducing adj agent)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/01/24 13:23
S67	569	(iridium adj oxide) and (CMP ("chemical mechanical polishing"))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/01/24 13:24
S68	569	(iridium adj oxide) and (CMP or ("chemical mechanical polishing"))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/01/24 13:24
S69	46	(iridium adj oxide) same (CMP or ("chemical mechanical polishing"))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/01/24 14:09
S70	2	*4717581".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/01/24 14:09
S71	2	*4679572".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/01/24 14:11
S72	2567	451/41.acis. and polish\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/07/12 10:33
S73	550	451/56.acis. and polish\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/07/12 10:33
S74	427	451/60.acis. and polish\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/07/12 10:33
S75	80	(S72 S73 S74) and ("pH" near2 (buffering buffer buffer\$4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/07/12 10:43

# EAST Search History

S76	266	(S72 S73 S74) and (surfactant)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/07/12 10:55
S77	1183	(ammonium adj hydroxide) same ("pH" near2 (buffering buffer buffer\$4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/07/12 10:43
S78	366	(ammonium adj hydroxide) with ("pH" near2 (buffering buffer buffer\$4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/07/12 10:44
S79	105	(ammonium adj hydroxide) near4 ("pH" near2 (buffering buffer buffer\$4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/07/12 10:44
S80	2	(S72 S73 S74) and ((advantages advantageous advantag\$5) with surfactant)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/07/12 10:56
S81	5	("451".clas.) and ((advantages advantageous advantag\$5) with surfactant)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/07/12 11:00
S82	40	("451".clas.) and ((desired improve improved improvement) with surfactant)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/07/12 11:05
S83	2	"5783489".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/07/12 11:05

## EAST Search History

S84	3	(polishing adj (pad pads)) and (CMP or "chemical mechanical polishing" agent) or "chemical mechanical planarization" and ((reducing adj agent) with (hydroxylamine and ((("3-hydroxy-4-pyrones") or borane or borohydrides or (dialkylamine adj borane\$3) or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 16:29
S85	3	(polishing adj (pad pads)) and (CMP or "chemical mechanical polishing" agent) or "chemical mechanical planarization" and ((reducing adj agent) with (hydroxylamine and ((("3-hydroxy-4-pyrones") or borane or borohydrides or (dialkylamine adj borane\$3) or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 15:44
S86	241	((reducing adj agent) with (hydroxylamine and ((("3-hydroxy-4-pyrones") or borane or borohydrides or (dialkylamine adj borane\$3) or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 15:45
S87	3	(polishing adj (pad pads)) and ((reducing adj agent) with (hydroxylamine and ((("3-hydroxy-4-pyrones") or borane or borohydrides or (dialkylamine adj borane\$3) or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 15:45

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## EAST Search History

S88	5	(CMP or "chemical mechanical polishing" or "chemical mechanical planarization") and ((reducing adj agent) with (hydroxylamine and ((("3-hydroxy-4-pyrones") or borane or borohydrides or (dialkylamine adj borane\$3) or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 16:56
S89	185	(semiconductor wafer polish planarize substrate copper) and ((reducing adj agent) with (hydroxylamine and ((("3-hydroxy-4-pyrones") or borane or borohydrides or (dialkylamine adj borane\$3) or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 15:49
S90	176	(wafer polish planarize substrate copper) and ((reducing adj agent) with (hydroxylamine and ((("3-hydroxy-4-pyrones") or borane or borohydrides or (dialkylamine adj borane\$3) or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 15:49
S91	185	(semiconductor polish planarize substrate copper) and ((reducing adj agent) with (hydroxylamine and ((("3-hydroxy-4-pyrones") or borane or borohydrides or (dialkylamine adj borane\$3) or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 15:49

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S92	185	(semiconductor planarize substrate copper) and ((reducing adj agent) with (hydroxylamine and ("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane or borohydrides or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 15:49
S93	185	(semiconductor substrate copper) and ((reducing adj agent) with (hydroxylamine and ("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane or borohydrides or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 15:56
S94	153	((reducing adj agent) and (hydroxylamine and ("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane or borohydrides or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 15:50
S95	104	(semiconductor substrate ) and ((reducing adj agent) with (hydroxylamine and ("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane or borohydrides or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 15:50

# EAST Search History

S96	29	(semiconductor semiconductor) and ((reducing adj agent) with (hydroxylamine and ("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane or borohydrides or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 16:11
S97	11	((("451" clas.) or ("428" clas.) or ("51" clas.)) and ((reducing adj agent) with (hydroxylamine and ("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane or borohydrides or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 16:11
S98	345	((polishing adj (pad pads)) or (CMP or "chemical mechanical polishing" or "chemical mechanical planarization") and ((reducing adj agent) with ("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane or borohydrides or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 16:51
S99	308	((polishing adj (pad pads)) or (CMP or "chemical mechanical polishing" or "chemical mechanical planarization") and (slurry composition solution) and ((reducing adj agent) with ("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane or borohydrides or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 16:46

# EAST Search History

S10 0	223	((polishing adj (pad pads)) or (CMP or "chemical mechanical polishing" or "chemical mechanical planarization") and ((slurry composition) and ((reducing adj agent) with ((("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane or borohydrides or (dialkylamine adj borane\$3) or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or (hypophosphorous adj acid) or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 16:51
S10 1	214	((polishing adj (pad pads)) or (CMP or "chemical mechanical polishing" or "chemical mechanical planarization") and ((reducing adj agent) with ((("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane or borohydrides or (dialkylamine adj borane\$3) or formaldehyde or (formic adj acid) or hydroquinone\$3 or (hypophosphorous adj acid) or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 16:51
S10 2	4	(CMP or "chemical mechanical polishing" or "chemical mechanical planarization") and ((reducing adj agent) with ((hydroxylamine glucose sulfonate (potassium adj iodide) with ((("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane or borohydrides or (dialkylamine adj borane\$3) or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 16:57

# EAST Search History

S10 3	4	(CMP or "chemical mechanical polishing" or "chemical mechanical planarization") and ((reducing adj agent) with ((hydroxylamine with ((("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane or borohydrides or (dialkylamine adj borane\$3) or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or (hypophosphorous adj acid) or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 17:17
S10 4	0	(CMP or "chemical mechanical polishing" or "chemical mechanical planarization") and ((reducing adj agent) with ((glucose sulfonate (potassium adj iodide) with ((("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane or borohydrides or (dialkylamine adj borane\$3) or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 16:57
S10 5	46	((polishing adj (pad pads)) or planarize planarization slurry) and ((reducing adj agent) with ((glucose sulfonate (potassium adj iodide) with ((("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane or borohydrides or (dialkylamine adj borane\$3) or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 17:01



# EAST Search History

S10 6	0	((polishing adj (pad pads)) or planarization) and (reducing adj agent) with ((glucose sulfonate (potassium adj iodide)) with ((("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane or borohydrides or (dialkylamine adj borane\$3) or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or (hypophosphorous adj acid) or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 17:01
S10 7	105	(CMP or "chemical mechanical polishing" or "chemical mechanical planarization") and (hydroxylamine with ((("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane or borohydrides or (dialkylamine adj borane\$3) or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or (hypophosphorous adj acid) or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 17:49
S10 8	105	(CMP or "chemical mechanical polishing" or "chemical mechanical planarization") and (hydroxylamine with ((("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane or borohydrides or (dialkylamine adj borane\$3) or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or (hypophosphorous adj acid) or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 17:48
S10 9	81	(CMP or "chemical mechanical polishing" or "chemical mechanical planarization") and (hydroxylamine with ((("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane or borohydrides or (dialkylamine adj borane\$3) or formaldehyde or (formic adj acid) or hydrogen or hydroquinone\$3 or (hypophosphorous adj acid) or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid) not (hydrogen adj peroxide))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 17:53

# EAST Search History

S11 0	24	S107 not S109	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 17:49
S11 1	31	(CMP or "chemical mechanical polishing" or "chemical mechanical planarization") and (hydroxylamine with ((("3-hydroxy-4-pyrones") or (hydroxy adj1 butyrolactones) or borane or borohydrides or (dialkylamine adj borane\$3) or formaldehyde or (formic adj acid) or hydroquinone\$3 or (hypophosphorous adj acid) or trihydroxybenzene or (solvated adj electrons) or (sulfurous adj acid))))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/02/14 17:53
S11 2	339	(complexing adj agent) with (chelating adj agent)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/02/15 08:55
S11 3	1	10/753138.app.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 15:43
S11 4	32	("20020039839" "20020090820" "20020102923" "20020111027" "20030013387" "20030119319" "5489233" "5527423" "5691219" "5958794" "6117783" "6139763" "6274063" "6313039" "6315803" "6419554" "6527622").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/02/15 09:28
S11 5	1	09/755717.app.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/02/15 09:28
S11 6	2	((polishing cmp "chemical mechanical polishing" "chemical mechanical planarization").it.) and (reducing adj agent) same (oxalic adj acid) same ((dimethylamine adj borane) hydroquinone "hydroquinone sulfonic acid" "hypophosphorous acid" trihydroxybenzene\$4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 12:06

## EAST Search History

S11 7	3	(polishing cmp "chemical mechanical planarization") and (reducing adj agent) same (oxalic acid) same ((dimethylamine adj borane) hydroquinone "hydroquinone sulfonic acid" "hypophosphorous acid" trihydroxybenzef4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 13:19
S11 8	36615	(polishing cmp "chemical mechanical planarization") and (reducing adj agent) same (oxalic acid) same ((dimethylamine adj borane) hydroquinone "hydroquinone sulfonic acid" "hypophosphorous acid" trihydroxybenzef4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 11:56
S11 9	7	(polishing cmp "chemical mechanical planarization".ti.) and (reducing adj agent) same (oxalic acid) same ((dimethylamine adj borane) hydroquinone "hydroquinone sulfonic acid" "hypophosphorous acid" trihydroxybenzef4) hydrogen borane borohydridef4 "sulfurous acid")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 14:31
S12 0	6	((polishing cmp "chemical mechanical planarization".ti.) and (reducing adj agent) same (oxalic acid) same ((dimethylamine adj borane) hydroquinone "hydroquinone sulfonic acid" "hypophosphorous acid" trihydroxybenzef4) hydrogen borane borohydridef4 "sulfurous acid"))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 16:36
S12 1	1	("451" clas.) and (reducing adj agent) same ((oxalic acid) formaldehyde (formic adj borane) hydroquinone "hydroquinone sulfonic acid" trihydroxybenzef4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 12:50

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S12 2	437	((reducing adj agent) same (oxalic acid) formaldehyde (formic adj borane) hydroquinone "hydroquinone sulfonic acid" "hypophosphorous acid" trihydroxybenzef4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/16 13:16
S12 3	2060024	((polishing adj (pad pads)) or (CMP or "chemical mechanical polishing" planarization") semiconductor (oxidizef4 near3 metal) slurry)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/03/15 12:55
S12 4	2060877	((polishing adj (pad pads composition compositions)) or (CMP or "chemical mechanical polishing" planarization") semiconductor (oxidizef4 near3 metal) slurry)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/03/15 12:54
S12 5	100	S122 and S124	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/03/15 12:55
S12 6	2050060	((polishing adj (pad pads)) or (CMP or "chemical mechanical polishing" planarization") semiconductor slurry)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/03/15 13:14
S12 7	84	S122 and S126	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/03/15 12:55
S12 8	1776495	((polishing adj (pad pads)) or (CMP or "chemical mechanical polishing" planarization") semiconductor)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/03/15 13:16
S12 9	8249	((reducing adj agent) same (oxalic acid) formaldehyde (formic adj acid))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 13:15
S13 0	466	S128 and S129	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 13:16
S13 1	926469	((polishing adj (pad pads)) or (CMP or "chemical mechanical polishing" planarization") semiconductor).ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/03/15 13:17

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S13 2	58	S131 and S129	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/03/15 13:17
S13 3	4	(polishing cmp "chemical mechanical polishing" "chemical mechanical planarization") and ((reducing adj agent) same (oxalic adj acid) same ((dimethylamine adj borane) hydroquinone "hydroquinone sulfonic acid" "hypophosphoric acid" trihydroxybenzene\$4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 13:21
S13 4	3	(polishing cmp "chemical mechanical polishing" "chemical mechanical planarization") and ((reducing adj agent) same (oxalic adj acid) same ((dimethylamine adj borane) hydroquinone "hydroquinone sulfonic acid" "hypophosphoric acid" trihydroxybenzene\$4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 13:21
S13 5	9	((polishing cmp "chemical mechanical polishing" "chemical mechanical planarization").i.) and ((oxalic adj acid\$3) formaldehyde (formic adj acid\$3)) same ((dimethylam\$4 adj borane\$4) hydroquinone "hydroquinone sulfonic acid" (hypophosphorous adj acid\$3) (hydrophosphor\$4 adj acid\$4) trihydroxybenzene\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 16:05
S13 6	937	(reducing adj agent) and (oxalic adj acid\$3) formaldehyde (formic adj acid\$3)) same ((dimethylam\$4 adj borane\$4) hydroquinone\$4 "hydroquinone sulfonic acid" (hypophosphorous adj acid\$3) (hydrophosphor\$4 adj acid\$4) trihydroxybenzene\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 15:34
S13 7	249916	(polishing cmp "chemical mechanical polishing" "chemical mechanical planarization")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 15:05
S13 8	71	S136 and S137	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 15:05

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S13 9	82214	(cmp "chemical mechanical polishing" "chemical mechanical planarization")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 15:05
S14 0	71	S136 and S138	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 15:06
S14 1	40	S136 and S139	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 15:06
S14 2	79	S136 and tantalum	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/16 08:40
S14 3	28	S142 and S141	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 15:07
S14 4	5029	((reducing adj agent) reductant reduc\$4) and ((oxalic adj acid\$3) formaldehyde (formic adj acid\$3)) same ((dimethylam\$4 adj borane\$4) hydroquinone\$4 "hydroquinone sulfonic acid" (hypophosphorous adj acid\$3) (hydrophosphor\$4 adj acid\$4) trihydroxybenzene\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 15:34
S14 5	14	S136 and tantalum and redox	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 15:43
S14 6	195	((polishing cmp "chemical mechanical polishing" "chemical mechanical planarization") and ((oxalic adj acid\$3) formaldehyde (formic adj acid\$3)) same ((dimethylam\$4 adj borane\$4) hydroquinone "hydroquinone sulfonic acid" (hypophosphorous adj acid\$3) (hydrophosphor\$4 adj acid\$4) trihydroxybenzene\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 16:08

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S14 7	6	((polishing cmp "chemical mechanical planarization".ti.) and ((reducing adj agent) same (oxalic adj) formaldehyde (formic adj acid) same (DMAB (dimethylamine adj borane) hydroquinone "hydrophosphorous acid" trihydroxybenzef4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/16 08:27
S14 8	0	((polishing cmp "chemical mechanical planarization".ti.) and ((reducing adj agent) same (oxalic adj acid) formaldehyde (formic adj acid) same (DMAB))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/15 16:37
S14 9	6	((polishing cmp "chemical mechanical planarization".ti.) and (((reducing adj agent) reductant reducer) same (oxalic adj acid) formaldehyde (formic adj acid) same (DMAB (dimethylamine adj borane) hydroquinone "hydrophosphorous acid" trihydroxybenzef4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/16 08:39
S15 0	6	((polishing cmp "chemical mechanical planarization".ti.) and (((reducing adj agent) reductant reducer) and ((oxalic adj acid) formaldehyde (formic adj acid) and (DMAB (dimethylamine adj borane) hydroquinone "hydrophosphorous acid" trihydroxybenzef4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/16 08:38
S15 1	1	("451" clas.) and (((reducing adj agent) reductant reducer) and ((oxalic adj acid) formaldehyde (formic adj acid) and (DMAB (dimethylamine adj borane) hydroquinone "hydrophosphorous acid" trihydroxybenzef4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/16 08:39

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S15 2	937	(reducing adj agent) and ((oxalic adj acid\$3) formaldehyde (formic adj acid\$3)) same ((dimethylam\$4 adj borane\$4) hydroquinone\$4 "hydroquinone sulfonic acid" (hypophosphorous adj acid\$3) trihydroxybenzef4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/16 09:32
S15 3	13	SI52 and (tantalum adj oxide)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/16 08:51
S15 4	13	SI52 and (tantalum adj oxide) and ((iridium ruthenium platinum rhodium palladium silver osmium gold)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/16 08:56
S15 5	8	SI52 and (tantalum adj oxide) and ((iridium ruthenium platinum rhodium palladium silver osmium gold) near2 oxide)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/16 09:07
S15 6	2	SI52 and (tantalum adj oxide) and ((iridium ) near2 oxide)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/16 09:07
S15 7	4	(donat\$4 near3 electron\$4) same ((oxalic adj acid\$3) formaldehyde (formic adj acid\$3)) same ((dimethylam\$4 adj borane\$4) hydroquinone\$4 "hydroquinone sulfonic acid" (hypophosphorous adj acid\$3) (hydrophosphor\$4 adj acid\$4) trihydroxybenzef4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/16 09:32
S15 8	84	(reducing adj agent) same ((oxalic adj acid) same ((dimethylamine adj borane) hydroquinone "hydroquinone sulfonic acid" "hypophosphorous acid" trihydroxybenzef4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/16 13:32
S15 9	4	((known common typical) near3 (reducing adj agent\$3)) same ((oxalic adj acid) same ((dimethylamine adj borane) hydroquinone sulfonic acid" "hypophosphorous acid" trihydroxybenzef4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/03/16 13:34

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